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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/641,830	08/18/2000	Clyde C. Lunsford	11920-1300	6429

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EXAMINER

GUARRIELLO, JOHN J

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/641,830

Applicant(s)

LUNSFORD ET AL.

Examiner

John J. Guarriello

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09/26/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 10-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9,27--35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

15. The Examiner acknowledges the affirmation of the Restriction requirement Group I, article claims 1-9; Group II, method claims 10-26 are withdrawn as to the non-elected invention. New claims 27-35 are directed to the article, Group I. Applicant's arguments regarding the traversal have been considered but claims 10-26 are drawn to a method which is independent and distinct, thus the Restriction is made final for reasons of record. The Examiner acknowledges the RCE of 8/15/2003, and the extension of time. The amendment after final of 4/01/2003 has been entered.

16. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 1-7, 27-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stanhope et al. 5,527,597 in view of Hussamy 4,705,523 and Johnson et al. 4,902,300.

Stanhope describes flame resistant fabric made from a plurality of warp fibers of a heat resistant material and a plurality of filler fibers, (see abstract; column 2, lines 51-67). Stanhope describes the warp yarns can be made from KEVLAR, corresponding to the para isomer of poly(p-phenyleneterephthalamide) which corresponds to para-aramid, or polyamide fiber, (column 4, lines 47-55). Stanhope describes other materials can be used such as rayon, acetate and others which are flame resistant, (column 4, lines 55-68). Stanhope

describes dyeing of fabrics for the desired tint or hue, (column 6, lines 56-68). Stanhope describes a mixture or blend of KEVLAR or similar aromatic polyamide fiber and polybenimidazole, (column 4, lines 47-49). Stanhope describes that it will be understood by those skilled in the art that various other flame resistant materials can be used for the blend, (column 4, lines 55-59). Stanhope describes any other flame resistant material can be used for making fabrics for garments which materials can be with cellulosic fibers with other flame resistant fibers, (column 4, lines 47-60). Stanhope is silent about color printing in a pattern on a fabric.

Hussamy describes aramid fabrics which are printed in a camouflage pattern, (column 1, lines 15-20). Hussamy describes a process of printing fabrics, (column 2, lines 34-57; and column 3, lines 1-31).

Johnson describes simultaneously dyed and flame retardant blends, (see abstract). Johnson describes fabric blends of synthetic and cellulosic materials, (column 1, lines 40-65). Johnson describes nylon, which is polyamide, cellulosic materials with flame retardants

that improve the flame resistance of fabrics, (column 1, lines 40-65).

Johnson describes cyclic phosphonates for imparting flame resistance to cellulosics and are compatible with dye conditions, (column 2, lines 47-68).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fabric of Stanhope with the flame retardant materials coated/treated cellulosics and phosphonates of Johnson and the printing patterns of Hussamy motivated with the expectation that the improved blend would be more flexible over conventional thermal resistant garments (column 1, lines 24-30) of '523, and have improved flame resistant and camouflage characteristics for the fabric.

Applicant's arguments regarding blend have been considered but they are not persuasive because '597 describes blend and other options for producing a material for the fabric, (column 4, line 50, lines 55-58; column 5, lines 20-21). Applicant's arguments regarding the difficulty of dyeing the para aramids with Cates are moot since Cates is not part of the rejection.

19. Claims 1, 8-9, 34, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stanhope 5,527,597 in view of Johnson et al. 4,902,300 and Riggins et al. 4,898,596.

The features of Stanhope and Johnson are set forth above in paragraph # 18 . However, the patents are silent about the dye-assistant agent.

Riggins describes a dye-assistant agent which is stated as a diffusion promoter useful in aramid fiber fabric dyeing processes, (column 2, lines 45-68). Riggins describes CHP, N-cyclohexyl-2-pyrrolidone, (column 3, lines 50-51), is a diffusion promoter in the dyeing process which appears to correspond to the dye-assistant of the claimed invention

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the dyeing of the fabric of Stanhope with the dye-assistant agent (diffusion promoter) of Riggins motivated with the expectation that the improved blend would

be more economically viable and have improved flame resistant characteristics for the fabric.

Applicant's arguments regarding combining the references since no blend is described have been considered but they are not deemed to be persuasive because '300 describes blend and other alternatives, (column 2, lines 45-46). Regarding the argument that flame retardant can be used is noted but '300 describes fire retardancy can be imparted, (column 2, lines 47-68).

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tanaka et al. 5, 356, 700 describes blends. Kent et al. 6,451,070 describes aramid blend fabrics.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Guarriello whose telephone number is 703-308-3209. The examiner can normally be reached on Monday to Friday from 8 am to 4 pm.

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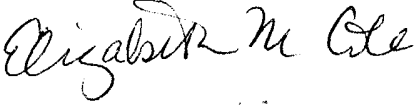
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris , can be reached on (703) 308-2414. The fax phone number for the organization where this application or proceeding is assigned is 703-305-5408.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


John J. Guarriello:gj

Patent Examiner

November 21, 2003


Elizabeth M. Cole
Patent Examiner